

Viewer's Guide
Switch Training DVD
Special Education Technology Center
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Ellensburg, WA 98926-7413

This instructional Video DVD was produced by the Special Education Technology Center to aid educational teams in developing techniques for training students to use single switches. The first video, **Switch Activities**, presents several students using (adaptive) single switches in a variety of activities. The second video, **Partner Assisted Scanning**, presents two students using the Partner Assisted Scanning (PAS) technique to participate in various social and academic tasks. This guide contains the narration that accompanies the title pages between the student video clips.

Video 1 – SWITCH ACTIVITIES

In this video you will see students of varying ages and abilities as they use single switches to participate in different activities. The activities were all designed to give the student maximum practice in using a single switch. In some cases the activities were designed to increase the student's understanding of cause and effect. In other cases the activities are cognitively simple, but are designed to give the student switch fluency that will be needed to use more complex communication devices or computer programs once their switch use skills are perfected.

Segment 1 – Early Switch Training (Music Activity)

In this first segment you will meet Rogelio who is at the beginning of switch activation training. Notice how long it takes him to process that the music has stopped and to search for the switch to restart the music. Once an optimal switch position is selected, it will be important to mark the position and always put the switch in the same place. Notice how the sound of the music is the only stimuli when he touches the switch. It is important not to use other verbal cues or reinforcements which might interfere with Rogelio's connection to what he has done.

Segment 2 – Computer Music (Computer Music Activity)

The next student you will see is Ashley; notice how she moves her right hand to touch a switch mounted on a triangular mount. She removes her hand and touches the switch again to start the music on the computer program. The switch mounted on the left side of the mount is not used for this activity.

Segment 3 – IntelliPics Story (Software Activity)

Again Ashley uses the same switch activation to run an *IntelliPics* story which contains music.

Segment 4 – *Feed the Frog* (Software Activity)

Now you will see Victor who is using a jelly bean switch mounted by his left temple to catch a fly on the computer program *Feed the Frog*.

Segment 5 – *Feed the Frog* (Software Activity)

In this segment Victor will play the game with another person who moves the circle and Victor catches the fly when the circle surrounds it.

Segment 6 – Video Game (Software Activity)

Switch Wars is a program that has many parameters that can be set. Here Victor watches a circle move to the item he wants to explode. Notice Victor responds to the cheering and noise making and adults who are present remain quiet so Victor can process the effect of his switch hits.

Segment 7 – *PowerPoint* Story (Software Activity)

Victor's mother translates a *PowerPoint* story to Spanish as Victor uses his switch to advance to the next slide. Victor is especially engaged when he hears the story in Spanish, the language of his home.

Segment 8 – Reading (Communication Activity)

Victor's mother reads to him in Spanish when Victor touches the switch attached to a BIGmack to say "Read some more please."

Segment 9 – Reading (Communication Activity)

The next student is Risa, who asks the teacher to read *Romeo and Juliet* from the *Start to Finish* book series. Notice how Risa quiets her body before attempting to use the switch placed by her left temple.

Segment 10 – Reading (PowerLink Activity)

And now Risa uses a PowerLink and tape recorder to read sections of *Romeo and Juliet* from the *Start to Finish* book series. Risa turns on the tape by using her switch.

Segment 11 – Aquarium Toy (Switch Practice)

Here is Victor again, using a simple switch activated toy for switch practice. The OT adds some soap to the toy aquarium to make the task more interesting for Victor.

Segment 12 – Cooling with a Fan (Switch Practice)

Victor gets more switch practice by turning on the fan which is connected to a PowerLink. The PowerLink is set on timed mode to increase the number of switch hits Victor makes in this activity.

Segment 13 – Drying Hair (Switch Practice)

In one more activity, Victor uses a hair dryer plugged into a PowerLink to dry his hair.

Segment 14 – Drying Hair (Switch Practice)

Risa also dries her hair. Both of these students were using timed mode on the PowerLink to get many opportunities to practice switch use.

Segment 15 – Go Go Go...(Communication Activity)

Now Victor uses a BIGmack with a message of several seconds duration saying “go go let’s go...” The OT pushes him until the message stops. Victor must repeat the message to get moving again.

Segment 16 – Scanning (Introductory Scanning Activity)

With his consistent motor activations, Victor is ready to move on. Here he demonstrates training for simple scanning. He uses *Speedy Press to Play* software to select an item with a verbal prompt from the software.

Segment 17 – Scanning (Complex Scanning Activity)

Now Victor shows use of a complex scan and works with a partner who chooses items for Victor to select. This activity confirms Victor’s control to select a specific target.

Thank You Title

Thank you to Rogelio, Ashley, Victor, Risa, their parents and school teams who helped make this project possible.

Special Thanks

Special thanks to Jennifer Westover for videotaping the students and to Carter Pock for narrating the section introductions.

Technology Information

For additional information about the technology used by the students, please refer to the Viewer’s Guide, which can be printed in Pdf format by going to the SETC web site at: www.cwu.edu/~setc and clicking on “Technical Assistance Papers” under the “Information” heading.

Video 2 - PARTNER ASSISTED SCANNING

Partner Assisted Scanning is a technique that a non-speaking individual can use to communicate messages with a speaking partner. The speaking partner provides the choices to the non-speaking person and that person indicates their choice. A choice can be indicated by a vocal sound, movement, or in the case of the students you will see in this video, by using a single switch to trigger a voice message on a single message device such as a BIGmack. By using a switch, the non-speaking individual is building skills that will be needed to use a more complex communication device or computer access system. This method also provides for more active participation mode than yes/no questions. In these video segments you will see two students who demonstrate how Partner Assisted Scanning can be used in both social and academic contexts.

Segment 1 – Ordering from a Menu

In the first segment, Risa orders from a typical menu using the switch by her left cheek, attached to a BIGmack single message device. Notice how the “waitress” goes quickly through the available options one time, then more slowly a second time so that Risa can indicate her choice.

Segment 2 – Choosing Colors

Now you will see Victor, who gives instructions to his Instructional Assistant indicating his color choices for sections of a picture. He will use a jelly bean switch mounted by his left cheek and connected to a BIGmack single message device. He is first instructed in how the system works. Notice how often he confirms his choice by repeating “that one” when the IA speaks his choice.

Segment 3 – Reading – Victor (Sight Reading Words)

Now Victor demonstrates some sight reading work. Three choices of words are presented to him and he indicates his choice when it is pointed to. Notice how quickly the IA can add another set of words after his first set. Notice also that when he does not make a choice, the items are scanned a second time. It’s important for the partner not to cue the student by intonation or irregular presentation rhythm. Victor may get a cue from his IA’s intonation in the second sample.

Segment 4 – Spelling (Selecting the letters to spell a word)

Here you will see Risa working on spelling, a challenging activity for her. A few letters are presented to Risa and she is able to indicate which letter comes next to spell a word. Notice that it is important where the partner stands. Positioning the scanning display on the wrong side can prevent the student from being able to use their switch in an effective manner. When Risa has difficulty with the task, it can quickly be altered to be a copying task, and still continue work on Partner Assisted Scanning.

Segment 5 – Math – Victor (Selecting from a number line)

Now Victor responds to simple mathematical problems that are presented to him with a number line and Partner Assisted Scanning so that he can tell the IA which numeral to write in the answer space.

Segment 6 – Math – Risa (Selecting from a number line)

Risa does math by giving answers as the partner scans the number line. Risa uses her switch and the BIGmack again to indicate her answers.

Partner Assisted Scanning (PAS) is a technique that can be used for social conversation, choice making, and academic work and assessment. Both Risa and Victor have shown their consistent, reliable switch ability on single switch activities prior to the more complex tasks shown in these video segments. PAS is a good way to continue progress in academics while establishing skills that will be needed to operate more sophisticated computer access tools or augmentative communication devices. These devices will provide independence that PAS lacks.

Thank You Title

Thank you to Victor and Risa, their parents and school teams who helped make this project possible.

Special Thanks

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Assistive Technology Items Used in Switch Activities & Partner Assisted Scanning Video Project

HARDWARE:

The following items are available from AbleNet
800.322.0956
www.ablenetinc.com

AbleNet PowerLink 3®

This control unit connects electric appliances to a corded or remote switch for safe and easy activation. The four modes of control are: Direct Mode, which keeps the appliance on only while the switch is activated; Seconds Mode, which allows the appliance to run for 1 to 60 seconds; Minutes Mode for 1 to 60 minutes and Latch Mode, where one activation turns the appliance on, the second turns it off.

PowerLink 3® \$182

The Jelly Bean® Switch

Jelly Bean switch features a 2 ½-inch activation surface. It comes in 5 colors

Jelly Bean® \$43

The Specs® Switch - 1.4" diameter and comes with three bases: standard flange base, a space saving flush base and a strap base for mounting around objects. 24" strap and small screwdriver included.

Specs switch ®\$49

AbleNet BIGmack®

BIGmack - a one message communication device. Record a message and press BIGmack to hear it. Connect BIGmack to a toy or appliance and link the voice output with a reward (cable included).

- * One-shot timer prevents unwanted message repetition.
- * 20 seconds of memory.
- * 5 inch diameter high impact ABS.
- * Volume control and on/off switch.
- * External 3.5mm switch jack and external speaker jack.

BIGmack ® \$99

The following items are available from Tash International Inc.
800.463.5685
www.tashinc.com

Buddy Button

The Buddy button has a diameter of 2.5 inches and is available in many colors.
Buddy Button \$42

The following items are available from Inclusive TLC
800.462.0930
[www.inclusive TLC.com](http://www.inclusiveTLC.com)

Maxess Mounting System

The Maxess Switch Tray and Switch Mounts enable switches to be securely positioned and repositioned in the most efficient and comfortable way.

Maxess Switch Tray

Cushioned for comfort, the Maxess Switch Tray holds switches or switch mounts firmly in place. Ideal for use with a student or in assessment situations, where a range of secure switch positions need to be tried.

MA61 Maxess Switch Tray \$49

Maxess Switch Mounts

Many students have greater control if the switch is placed at an angle. These double-sided switch mounts give two alternative mounting surfaces (55° and 85°). Used with the Maxess Switch Tray, the mounts offer a variety of positioning options. Velcro fixing pack included for one switch.

MA63 Maxess Small Switch Mount \$25

MA64 Maxess Medium Switch Mount \$27

MA65 Maxess Large Switch Mount \$29

SOFTWARE:

The following software items are available from manufacturers or vendors listed:

IntelliPics Studio 3

Intellitools

800.899.6687

www.intellitools.com

This is a multimedia presentation tool that allows teachers to create a wide range of activities for their students. The *IntelliPics* story shown on video tape was made with an earlier version of this software.

***IntelliPics Studio 3* \$139**

PowerPoint

The story about building a boat was created with *PowerPoint*, part of *Microsoft Office*. *PowerPoint* is easily controlled with a single switch used as the mouse click to advance to the next slide.

Speedy Press to Play

Don Johnston Inc.

800.999.4660

www.donjohnston.com

Press-to-Play - Speedy

The Press-to-Play Series™ gives you an effective, easy-to-use tool for teaching the basic single-switch skills that are the foundation of computer-based learning. See Speedy as he races his wheelchair, goes fishing, plays video games and more. Student input shows cause-and-effect.

Speedy, bundled with 3 other titles \$199

Sim Tech Software

Don Johnston Inc.

800.999.4660

www.donjohnston.com

Single-Switch Software for Teens (*Switch Wars*)

\$100.00 bundled with additional programs

Single-Switch Software for Preschoolers (*Frog and Fly*)

\$100.00 bundled with additional programs

TOYS:

The following toy is available from Enabling Devices

800.832.8697

www.enablingdevices.com

Aqua Lamp

Watch streaming bubbles and 3 lively fish floating in colorful water. Switch adapted.

Aqua Lamp #305 \$49.95

Aqua Lamp (unadapted) #305 U \$27.95